PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

I. D. # 5865

ENERGY DIVISION **RESOLUTION E-4009**

August 24, 2006

R E S O L U T I O N

Resolution E-4009. Pacific Gas & Electric (PG&E), Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) are authorized to add a new triggering mechanism for the Demand Reserves Partnership (DRP) Program.

No Advice Letters submitted. This resolution is initiated by Energy Division.

SUMMARY

PG&E, SCE and SDG&E are authorized to replace the current triggering mechanism for the Demand Reserves Partnership (DRP) Program with a new triggering mechanism.

PG&E, SCE and SDG&E (the utilities) are authorized to replace the current $80 per MWh trigger with a heat-rate trigger of 15,000 BTU per kWh for the DRP program. This modification means that the DRP would no longer be triggered when the utilities forecast the price of energy (day-ahead) to be greater than $80 per MWh. With the change, the DRP would be triggered by the utilities when they anticipate (day-ahead) the use of generation resources that are equivalent to a power plant with a heat-rate of 15,000 BTU per kWh. This change is intended to encourage aggregators to nominate more demand response MWs for the remaining summer months of 2006.

The underlying contract between Department of Water Resources (DWR) and the California Consumer Power and Conservation Authority (CPA) should not be affected by the utilities' use of a heat-rate trigger.

Energy Division is not proposing that any terms or conditions in the existing contract between DWR and the CPA be modified by those parties, and does not anticipate that the use of a heat-rate trigger will cause those terms and conditions to be modified in any way.

The Capacity Bidding Program (CBP) will undergo a full evaluation, including the heat-rate trigger, through the advice letter process.

The CBP has been proposed by the utilities as next year's replacement program for the DRP and its proposed use of the heat-rate trigger is the substance of Energy Division's recommendation in this resolution. The use of the CBP heat-rate trigger for the DRP is being recommended because of the state's serious energy situation and the possibility that its use in the DRP could generate more demand response MWs. The proposed CBP will be fully evaluated, including the heat-rate trigger, and the Commission's authorization to incorporate the heat-rate trigger for the DRP does not imply tacit approval for the CBP as proposed.

BACKGROUND

The Demand Reserves Partnership Has Been a Demand Response Resource since 2002.

The Demand Reserves Partnership (DRP) was created in 2002. The foundation of the program is a five-year contract between the California Consumer Power and Conservation Financing Authority (CPA)[1] and the California Department of Water Resources (DWR). The contract functions much like the other power supply contracts signed by DWR on behalf of the utilities by providing power, where and when needed, but through reductions in demand, rather than generation.

There are various supporting contracts, called "Demand Reserves Provider Agreements", which underlie the contract between DWR and the CPA. These contracts, between the CPA and several third-party aggregators, specify the terms and conditions of how aggregators provide power to DWR. The terms of

[1] In 2004 the Governor's budget terminated the CPA's operating budget, but the administration also stated that the DRP should continue. The CPA remains a legal entity because no changes were made to its originating statute. The DRP has been operated by consultants under the authority of a Fiscal Agent who has been delegated responsibility to administer the CPA-DWR contract on behalf of the CPA. The Fiscal Agent is from the state Business, Transportation and Housing Agency. The actual operation of the DRP program is conducted by consultants whose costs are paid for by the DWR-CPA contract. The term "DRP operators" in this document refers to these consultants.

the supporting contracts mirror the terms of the contract between DWR and CPA. The Demand Reserve Providers, in turn, have individual agreements with electricity customers who provide the actual demand reduction.

As currently operated, the contracts provide that, when notified by DWR, customers who were consuming power in the normal course of business, curtail their load and make power available for the customers of the utilities. An electronic notification is sent from DWR, to the CPA (and its contractor Automated Power Exchange (APX)), to the aggregators and finally to the customers. In exchange for nominating load available for reduction, aggregators are paid a monthly capacity payment (payment varies by the length of time that the load reduction will be provided):

Group A (1-3 hrs. per call): $8,500/MW-month

Group B (1-5 hrs. per call): $9,000/MW-month

Group C (1-8 hrs. per call): $10,000/MW-month

Aggregators are also paid an energy payment of $80 per MWh (for actual amount of energy reduced) when the program is triggered.

The contract between DWR and CPA allows DWR to trigger the program during high wholesale market prices or when energy supplies are short. The contract between DWR and CPA will terminate in May 2007[2].

The Commission Ordered the Utilities to make arrangements to trigger the DRP when it is cost-effective to do so.

In D.03-06-032, the Commission recognized the DRP as a viable and important program, and directed PG&E, SCE and SDG&E (the utilities) to coordinate their scheduling activities with DWR (and the CPA) to ensure that the DRP resources are actually dispatched when it is cost effective to do so. The utilities were specifically ordered to file implementation plans detailing how they will use the DRP resource effectively.

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[2] Per D.06-03-024, PG&E (2839-E), SCE (2010-E) and SDG&E (1799-E) filed advice letters on June 1, 2006 seeking Commission approval for a replacement program (called the Capacity Bidding Program) that is designed similar to the DRP.

By 2005, the Commission approved the agency agreements between the utilities and DWR that enable the utilities to schedule and dispatch DRP resources, essentially allowing them to operate as DWR's limited agents[3].

Participation in the DRP has dropped significantly in 2006 due in part to the IOUs' economic dispatch of the program

In 2005, the utilities called on the program with great frequency, triggering the program (often times on back-to-back days) when the forecast price of energy exceeded $80 per MWh[4]. The frequency of events in 2005 caused dissatisfaction among aggregators and program participants. The 2005 Evaluation[5] of the program found:

> The DRP program was designed to be triggered by either price or reliability issues, but in the perception of aggregators as well as customers, the price-responsive aspect of the program is also seen as linked to system reliability. Consequently, neither aggregators nor customers were prepared for the program to be called based on a price trigger alone when there was no evidence of capacity shortages within the system.

While 2005 Evaluation also reported that surveyed DRP participants stated that they would remain with program in spite of their dissatisfaction with the frequency of calls, it appears that participation in the program in 2006 has significantly dropped off. The monthly nominations for the DRP this summer to date has been 210. 6 MWs (June) and 206.8 MWs (July). In comparison monthly nominations in 2005 were 216.8 MWs (June), 255.8 MWs (July) and 226.8 MWs (August). 200 MWs are provided by a single customer, DWR's State Water Project (pumping load) in PG&E's territory. Of particular concern are the

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[3] While the agency agreements were approved by Energy Division, the agreements remain unsigned by DWR. However, according to DWR and the utilities, the utilities request dispatch of the program via DWR.

[4] The DRP was called 24 times by PG&E, 19 times by SCE and 7 times by SDG&E in the summer of 2005.

[5] Evaluation of 2005 Statewide Large Non-residential Day-Ahead and Reliability Demand Response Programs Final Report, pg. 3-22. Conducted by Quantum Consulting.

nominated loads for the DRP in Southern California. Zero DRP MWs have been nominated in SCE's territory for the month of July for example.[6]

The DRP operators informed Energy Division that aggregators are reluctant to nominate significant load on a monthly basis due to an on-going concern that the program will be triggered by the utilities in the same way it was in 2005, when the forecast price of energy is expected to exceed $80 per MWh.

A Heat-Rate is proposed as a new trigger for the DRP replacement program
As noted earlier, the DRP will expire when the contract between the CPA and DWR expires in May 2007. The utilities have proposed a replacement program called the Capacity Bid Program (CBP) that is undergoing review by the Commission. The utilities' CBP is designed in similar fashion to the DRP in that it provides capacity and energy payments to aggregators for load reductions. One significant difference between the DRP and CBP is the CBP's use of a heat-rate as the triggering mechanism, instead of the current $80 per MWh trigger employed by the utilities. Specifically, the CBP would be triggered by a heat-rate of 15,000 BTU per kWh, meaning that it would be triggered when the utilities anticipate on a day-ahead basis the use of generation resources that are equivalent to a power plant with that heat-rate. The utilities anticipate that the use of 15,000 BTU per kWh heat rate as the trigger condition will result in approximately 11 program calls per summer.[7] To provide a sense of comparison, SCE controls approximately 270 MWs via gas turbine peakers (those that can provide full load within one hour of start-up) whose heat rates vary between 13,000 and 16,000 BTU per kWh. For SCE, incorporating the proposed heat-rate trigger for the DRP places the program among SCE's stack of peaker plants in its dispatch order.

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[6] Monthly nomination report provided by the DRP operators on June 28, 2006.

[7] The utilities estimated that if heat-rate trigger was used for the DRP in a test year, the DRP would have been triggered 11 times (per DRP conference call with Energy Division on April 26, 2006). Depending on certain conditions, the number of calls could fluctuate.

Aggregators have identified the heat-rate trigger in the CBP as a major improvement over the DRP, as it provides a clear, transparent and verifiable trigger mechanism in contrast to the $80 per MWh trigger of the DRP.[8]

NOTICE

No advice letters have been filed to initiate this resolution, and therefore no notice has been made other than this draft resolution. The draft resolution has been distributed to R.02-06-001, A.05-06-006 et. al. Additionally parties who have protested SCE's Advice Letter 2010-E, PG&E's Advice Letter 2839-E, and SDG&E's Advice Letter 1799-E, whose subject is related to the substance of this resolution, also received the draft resolution.

PROTESTS

This resolution is being generated by the Energy Division and not in response to any filings made by the utilities. Thus there is no proposal for intervenors to protest.

DISCUSSION

Aggregators may increase the number of MWs they nominate monthly for the DRP if the Utilities are authorized to replace the $80 per MWh trigger with a heat-rate trigger of 15,000 BTU per kWh.
Energy Division recommends that the Commission authorize the utilities to replace the $80 per MWh trigger with the heat-rate trigger of 15,000 BTU per kWh for dispatch of the DRP for the remaining summer months of the program. Energy Division believes that this change will encourage aggregators to increase their monthly nominations for the DRP.

Based on the findings in 2005 Evaluation of the DRP and subsequent discussions with the DRP operators, the current trigger of $80 per MWh appears to be a principal barrier to participation this year due to the frequency of the calls

[8] Joint protest by six aggregators to the IOUs' advice letters (SCE's AL 2010-E, PG&E's AL 2839-E, SDG&E's AL 1799-E) proposing the CBP.

generated by that trigger in 2005. A comparison of the 2005 monthly nominations to the 2006 monthly nominations supports the DRP operators' contention that the aggregators are reluctant to participate as there clearly is a drop-off of as much as 55 MWs between the two years. SCE's monthly demand response report to Energy Division indicates that there are 98 accounts currently enrolled in the DRP[9], yet as noted above, the amount of nominated load for the DRP in SCE's territory for the month of July is zero. Energy Division concludes that incorporating the heat-rate trigger for dispatch of the program provides aggregators a greater assurance that the program will be called when the system is facing viable capacity shortage, and thus they may be more apt to nominate more MWs.

The utilities trigger the DRP using the $80 per MWh trigger to ensure that the DRP is operated as cost-effectively as possible, per the Commission's instructions. Insertion of the heat-rate as the new triggering mechanism for the DRP modifies the program dispatch from a pure price trigger to a mechanism that is tied to power plant efficiency. This change will likely reduce the number of times the DRP is called and will therefore reduce opportunities for the utilities to avoid paying energy prices that exceed $80 per MWh. However, the state of California is currently facing severe system constraints, setting a record for demand on July 21 (49,000 MWs) and again on July 24 (50,200 MWs). The California Independent System Operator has issued several recent Power Alerts and also issued a Stage 2 alert on the July 24. The state has literally strained to meet its demand between July 21 and 24. If conditions drive demand back to these high levels, such as extremely hot temperatures, or if supply resources fail to materialize (plant outages for example) greater amounts of demand response will be needed to avoid rotating outages. Energy Division believes that the trade-off presented here (less opportunities for the utilities to avoid energy prices in excess of $80 per MWh in exchange for the possibility of attracting more nominated demand response MWs) is reasonable one in light of the state's current supply and demand outlook.

The contract between DWR and the CPA should not be affected by incorporation of the heat-rate trigger.

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[9] SCE's monthly demand response report to Energy Division for the month of June, filed on July 21, 2006.

Energy Division is not proposing that any terms or conditions in the existing contract between DWR and the CPA be modified by those parties, and does not anticipate that the use of the proposed heat-rate trigger will cause those terms and conditions to be modified in any way.

The CBP will undergo a full evaluation, including the heat-rate trigger, through the advice letter process.
As noted above, a replacement program for the DRP, the CBP, has been proposed by the utilities via advice letters. Those advice letters have been protested by at least five parties for a variety of reasons, and at least one party had concerns about the heat-rate trigger. The use of the CBP heat-rate trigger for the DRP is being recommended because of the state's serious energy situation and the possibility that its use in the DRP could generate more demand response MWs. The proposed CBP will be fully evaluated, including the heat-rate trigger, and the Commission's authorization to incorporate the heat-rate trigger for the DRP does not imply tacit approval for the CBP as proposed.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission.

FINDINGS

1. The Demand Reserves Partnership (DRP), created in 2002, is based upon a five-year contract between the California Consumer Power and Conservation Financing Authority (CPA) and the California Department of Water Resources (DWR).

2. The DRP contract functions much like the other power supply contracts signed by DWR on behalf of the utilities by providing power, where and when needed, but through reductions in demand, rather than generation.

3. "Demand Reserves Provider Agreements", which underlie the contract between DWR and the CPA, specify the terms and conditions of how aggregators provide power to DWR.

4. In exchange for nominating load available for reduction, aggregators are paid a monthly capacity payment (payment varies by the length of time the reduction will be provided) along with an energy payment (for the actual amount of energy reduced) when the program is triggered.

5. The contract between DWR and CPA allows DWR to trigger the program during high wholesale market prices or when energy supplies are short. The contract between DWR and CPA will terminate in May 2007.

6. In D.03-06-032, the Commission recognized the DRP as a viable and important program, and directed PG&E, SCE and SDG&E to coordinate their scheduling activities with DWR (and the CPA) to ensure that the DRP resources are actually dispatched when it is cost effective to do so.

7. By 2005, the Commission approved the agency agreements between the utilities and DWR that enable the utilities to schedule and dispatch DRP resources, essentially allowing them to operate as DWR's limited agents.

8. In 2005, the utilities called on the program with great frequency, triggering the program (often times on back-to-back days) when the forecast price of energy exceeded $80 per MWh[10]. The frequency of events in 2005 caused dissatisfaction among aggregators and program participants.

9. The monthly nominations for the DRP this summer to date has been 210. 6 MWs (June) and 206.8 MWs (July). In comparison monthly nominations in 2005 were 216.8 MWs (June), 255.8 MWs (July) and 226.8 MWs (August). Zero DRP MWs have been nominated in SCE's territory for the month of July.

10. Aggregators appear to be reluctant to nominate significant load to the DRP on a monthly basis due to an on-going concern that the program will be triggered by the utilities in the same way it was in 2005, when the forecast price of energy is expected to exceed $80 per MWh.

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[10] The DRP was called 24 times by PG&E, 19 times by SCE and 7 times by SDG&E in the summer of 2005.

11. Based on one test year analysis, the utilities anticipate that the use of 15,000 BTU per kWh heat rate as the trigger condition will result in approximately 11 program calls per summer.

12. Aggregators have identified the heat-rate trigger in the CBP as a major improvement over the DRP, as it provides a clear, transparent and verifiable trigger mechanism in contrast to the $80 per MWh trigger of the DRP.

13. Energy Division recommends that the Commission authorize the utilities to replace the $80 per MWh trigger with the heat-rate trigger of 15,000 BTU per kWh for dispatch of the DRP for the remaining summer months (August and September 2006) of the program as this change will encourage aggregators to increase their monthly nominations for the DRP.

14. The state of California is currently facing severe system constraints, setting a record for demand on July 21 (49,000 MWs) and again on July 24 (50,200 MWs). The California Independent System Operator has issued several recent Power Alerts and issued a Stage 2 alert on the July 24.

15. Energy Division believes that the trade-off presented here (less opportunities for the utilities to avoid energy prices in excess of $80 per MWh in exchange for the possibility of attracting more nominated demand response MWs) is a reasonable one in light of the state's current supply and demand outlook.

16. The contract between DWR and the CPA should not be affected by addition of the heat-rate trigger.

17. The proposed CBP will be fully evaluated, including the heat-rate trigger, and the Commission's authorization to incorporate the heat-rate trigger for the DRP does not imply tacit approval for the CBP as proposed.

THEREFORE IT IS ORDERED THAT:

1. PG&E, SCE and SDG&E shall replace their current trigger of $80 per MWh for their dispatch of the Demand Reserves Partnership with the heat-rate trigger of 15,000 BTU per kWh for the remaining summer months (August and September) of 2006.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on August 24, 2006; the following Commissioners voting favorably thereon:

STEVE LARSON
Executive Director